

SYSTEMS AND METHODS FOR ELECTROSURGICAL ABLATION AND RESECTION

ABSTRACT OF THE DISCLOSURE

5

Methods and apparatus for resecting and ablating tissue at a target site of a patient, the apparatus including a probe having an elongate shaft. The shaft includes a shaft distal end portion and a shaft proximal end portion, and a resection unit located at the shaft distal end portion. The resection unit includes a resection electrode support and at least one resection electrode arranged on the resection electrode support. The at least one resection electrode includes a resection electrode head. The probe and resection electrode head are adapted for concurrent electrical ablation and mechanical resection of target tissue. The shaft may include at least one digestion electrode capable of aggressively ablating resected tissue fragments. At least one fluid delivery port on the shaft distal end portion may provide an electrically conductive fluid to the resection unit or to the target site. The shaft may include at least one aspiration port, located proximal to the resection unit, for aspirating excess or unwanted fluids and resected tissue fragments from the target site. The at least one aspiration port is coupled to an aspiration lumen. The at least one digestion electrode may be arranged within the aspiration lumen for ablation of tissue fragments therein. In use, the digestion and resection electrodes of the probe are coupled to a high frequency power supply. A surgical kit comprising the probe is also disclosed, together with a method of making the probe.

008011-5E00250